Reply to Office Action of October 8, 2008

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes Figs. 1-2, replaces the original sheet including Figs. 1-2.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

Favorable reconsideration of this application in view of the above amendment and following remarks is respectfully requested.

Claims 1-5 are pending. In the present amendment, Claim 1 is currently amended and new Claims 2-5 are added. Support for the present amendment can be found in the original specification, for example, at page 3, lines 21-25, and in Figures 1 and 4. Thus, it is respectfully submitted that no new matter is added.

In the outstanding Office Action, the drawings were objected to; Claim 1 was rejected under 35 U.S.C. § 112, second paragraph; Claim 1 was rejected under 35 U.S.C. § 103(a) as unpatentable over Stagg et al. (U.S. Patent No. 4,877,671, hereinafter "Stagg") in view of Sharp et al. (U.S. Patent No. 3,767,498, hereinafter "Sharp"); and Claim 1 was provisionally rejected on the ground of non-statutory obviousness-type double patenting over Claim 1 of co-pending U.S. Application No. 10/582,784.

In response to the objection to the drawings, Figure 1 is hereby amended to better distinguish between the fold lines and the shading. It is noted that all solid lines in amended Figure 1 are fold lines. It is respectfully submitted that no new matter is added. Accordingly, it is respectfully requested that the objection to the drawings be withdrawn.

Turning now to the rejection under 35 U.S.C. § 112, second paragraph, it is noted that the portion of Claim 1 cited by the Examiner as being indefinite is hereby deleted from Claim 1. In view of amended Claim 1, it is believed that all pending claims are definite and no further rejections on that basis are anticipated. However, if the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work with the Examiner in a joint effort to derive mutually acceptable language.

Turning now to the rejection under 35 U.S.C. § 103(a), Applicants respectfully request reconsideration of this rejection and traverse this rejection, as discussed below.

Amended Claim 1 recites:

A sandwich panel core, wherein

the core is a 3-D structure formed from polymeric paper,

a binder layer is applied onto a top and a bottom of the core,

the paper includes perforation holes, and

the binder layers bond to each other at a location of the perforation holes.

The sandwich panel core described in Claim 1 exhibits increased strength and rigidity as a result of binder layers being applied to the top and the bottom of the core. Further, the structure of the core of Claim 1 allows a decrease of the thickness of the binder layers under the strength given. Therefore, the overall weight of the core structure is decreased. It is respectfully submitted that the cited references do not disclose or suggest every feature recited in amended Claim 1.

Stagg describes a heat insulating panel 10 at the top and bottom of which a corrugated paper layer 14 is adhered to a outer liner 16. A fold-shaped core member 30 made of a fibrous material such as sawdust is positioned on the inside of the corrugated layer 14. A foam core 24 is placed in between the upper and lower fold-shaped core members 30. Through-holes 32 are made in the fold-shaped core member 30, which provide the foam core 24 access to the surface of the corrugated layer 14.

However, it is respectfully submitted that <u>Stagg</u> does not disclose or suggest a "sandwich panel core, wherein the core is a 3-D structure formed from polymeric paper, a binder layer is applied onto a top and a bottom of the core," as recited in amended Claim 1.

¹ See Stagg, at col. 2, lines 30-38.

² See Stagg, at col. 2, lines 55-60.

³ See Stagg, at col. 3, lines 40-43.

⁴ See Stagg, at col. 3, lines 16-18.

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Instead, as seen in Figure 4 of <u>Stagg</u>, the through-holes 32 connect the foam layer 24 with the corrugated layer 14. In contrast, the perforations in the polymeric paper in Claim 1 allow the binder layers on the top and the bottom of the paper to bond to each other. Further, it is respectfully submitted that <u>Sharp</u> does not cure the deficiencies of <u>Stagg</u>. Accordingly, it is respectfully requested that the rejection of Claim 1 as anticipated by <u>Nicholson</u>, be withdrawn.

New Claims 2-5 are added by the present amendment. Support for new Claims 2-5 can be found in the original specification, for example, at page 3, lines 22-24, and in Figures 1 and 4. Thus, it is respectfully submitted that no new matter is added. Additionally, new Claims 2-5 are dependent on Claim 1, and are thus believed to be patentable for at least the reasons discussed above with respect to Claim 1. Accordingly, it is respectfully submitted that new Claims 2-5 further patentably define over the cited references.

In response to the provisional non-statutory obviousness-type double patenting rejection of Claim 1 over Claim 1 of U.S. Application No. 10/582,784, Applicants respectfully traverse the rejection. The sandwich panel core described in Claim 1 of U.S. Application No. 10/582,784 is made with perforations along zigzag bending lines for bonding between the core and the skin along zigzag lines with the use of a composite adhesive material. The purpose of the perforation is to provide a location for placement of the composite adhesive material for the core-skin bonding. On the contrary, in Claim 1 of the present invention "the binder layers bond to each other at a location of the perforation holes." Accordingly, it is respectfully requested that the double patenting rejection of Claim 1 be withdrawn.

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Consequently, in view of the present amendment, no further issues are believed to be outstanding in the present application, and the present application is believed to be in condition for formal allowance. A Notice of Allowance is earnestly solicited.

Respectfully submitted,

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